Aberdeen Plant Materials Center Intermountain Plant Notes 2007





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A newsletter to inform you about activities at the Aberdeen Plant Materials Center

Who We Are

The Aberdeen Plant Materials Center (PMC) was established in 1939 to develop plant materials and techniques for establishment and management of plants for use in resource conservation activities in the Western United States. Currently, there are 27 Plant Materials Centers nationwide, each serving a specific geographic and ecological area. The Aberdeen PMC service area covers 83 million acres of the Intermountain West encompassing southern Idaho, western Utah and parts of northern Nevada, western Wyoming and southeastern Oregon.



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Coffee Point Off-Center Evaluation

Last November the PMC planted a large, multi-species, off-center evaluation planting at Coffee Point, 20 miles northwest of Aberdeen. The site is located on BLM land on an ecological site that historically supported a Wyoming big sagebrush/bluebunch wheatgrass plant community that receives an average of 8 to 12 inches annual precipitation. The evaluation planting includes 58 accessions of forbs, shrubs, and native and introduced grasses and is designed to test which accessions are best suited for use in low-precipitation sites in southern Idaho and northern Utah. Tested species include basin wildrye; Sandberg bluegrass; bottlebrush squirreltail; bluebunch, Snake River, thickspike, western and slender wheatgrasses; four shrubs; nine forbs and three introduced grasses. Evaluation of these plantings are planned to occur from 2007 through 2017 to determine long-term performance and survival of the test species.



Skull Valley Off-Center Evaluation

The NRCS Utah State office and Tooele Field Office are assisting the PMC with a second off-center test site where we plan to plant another large scale evaluation planting. Accessions are being assembled, and the site is being prepared for planting in November 2007. The current list of accessions includes many from the Coffee Point trial along with some new additions. The Skull Valley location is a sandy site, so we are able to test a slightly different suite of species adapted to those ecological conditions. Thanks to all who provided seed for both the Skull Valley and Coffee Point plantings.

Wild Buckwheat Initial Evaluation Planting

During the fall of 2006, the PMC planted 32 accessions of sulphurflower and parsnipflower, or whorled buckwheat, in an initial evaluation trial at the new Pearl Farm. The trial includes 10 accessions of sulphurflower and 22 accessions of parsnipflower buckwheat collected from native stands in Idaho, Wyoming, California and Oregon.

Native forbs or wildflowers and half-shrubs, are important for increasing biodiversity, improving wildlife habitat and providing food for birds and mammals. There is an ever increasing demand for native forb and half-shrub releases for use in revegetating rangelands in our service area, especially in regions occupied by sage grouse, in efforts to restore native habitats. Buckwheat species are common throughout the sagebrush and mountain regions of the West. Some species are also utilized in the xeriscaping industry and have potential for roadside beautification and diversification projects. The goal of this trial is to identify and release one or more superior sulphurflower and/or parsnipflower or whorled buckwheat accessions adapted for use in the Aberdeen PMC service area.

New Equipment

In March, the PMC acquired a new Wintersteiger Delta Plot Combine to harvest Foundation and other seed increase fields. The new combine is a much needed addition to the PMC list of equipment due to the increased production acres from the acquisition of the Pearl farm.

The PMC also plans to purchase a new greenhouse lighting system. This will facilitate growing plants during the winter months. The new lights will allow the PMC to produce significantly more, higher quality containerized seedlings than previously possible.



Indian Valley Sedge

In 2006 the PMC began propagating plants of Indian Valley sedge as part of a project to reestablish populations in its native habitat at the "Jewel Wetland" in southwestern Idaho. This unique species was first collected in the Weiser Valley by Marcus E. Jones on July 12, 1899, at Indian Valley, ID and it was not seen again for 100 years. The species was thought to be extinct, until 1999 when a population was discovered south of Council, in Adams County, ID. As a result, Indian Valley sedge was moved from the Idaho Native Plant Society's Taxa Believed to be Globally Extinct category to the Global Priority 1 category.

This project is being coordinated by the NRCS Payette Field Office on a Wetland Reserve Program (WRP) site in cooperation with land owners Jon and Mary Trail, with support from the Land Trust of the Treasure Valley. The project involves several interested parties, including the USDA Forest Service Rocky Mountain Research Station and Idaho Department of Fish and Game. Volunteers from these agencies have assisted in seed collection and will be on hand to transplant greenhouse grown plants at the site this summer.



Seed Production for Grand Teton National Park

The PMC entered into an agreement with Grand Teton National Park to produce seed of several native grass species to preserve the park's native plant resources and to revegetate park lands. In the spring of 2006 the PMC planted 2.7 acres of blue wildrye, 0.25 acres of Sandberg bluegrass, 1.0 acres of mountain brome and 1.0 acres of slender wheatgrass. Seed harvests will begin in 2007 and continue through 2008. The PMC will also be planting additional fields of Idaho fescue and bluebunch wheatgrass for the park in 2008.

Upcoming Releases

The PMC, in cooperation with the US Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory and the ARS Forage and Range Research Lab in Logan, UT, plans to release selections of Siberian wheatgrass and Western wheatgrass. These accessions were bred by the ARS and were tested over a seven year period by the Army at Camp Guernsey, WY and the Yakima Training Center, WA and other sites. The accessions were part of a project to identify and develop wear-resistant grass cultivars for use on military lands, and these lines have shown superior traits in germination and establishment. The PMC is increasing seed to prepare the varieties for commercial release. Foundation seed will be maintained by the PMC.



Foundation/Early Generation Seed Production

A major responsibility of the PMC is the production of Foundation seed of the center's plant releases. In 2006, the PMC produced over 6500 lbs of Foundation seed of Goldar bluebunch wheatgrass, Anatone bluebunch wheatgrass, Paiute orchardgrass, Bannock thickspike wheatgrass, Maple Grove Lewis flax, Richfield firecracker penstemon, Clearwater Venus penstemon, Northern Cold Desert winterfat, Snake River Plains fourwing saltbush, Delar small burnet and Magnar basin wildrye. In 2006 the PMC also shipped just over 6500 lbs of seed through the Utah Crop Improvement Association and the Idaho Foundation Seed program.

In 2007 the PMC is maintaining foundation seed production fields of Anatone, Snake River Plains, Northern Cold Desert, Delar, Maple Grove, Richfield, Clearwater, Bannock, Magnar, Goldar and Appar blue flax. Contact the UI Foundation Seed Program or the Utah Crop Improvement Association to request seed.

New Grass Display Nursery

In the spring of 2007, the PMC will be planting a new grass display nursery at the PMC home farm. The new nursery will include approximately 65 accessions showcasing releases and test materials of nearly 30 species suited for reclamation, restoration or irrigated pasture plantings in the PMC service area. The display is divided into three sections according to irrigation needs or reflecting natural precipitation ranges; 12 inches or less, 12 to 16 inches, and 16 inches or greater. This is a wonderful tool for land managers, cooperators and field office staff to see mature stands of the species that they may be considering for planting projects.

Native Species Evaluations

There are several initial and advanced test plantings in various stages currently underway at the PMC investigating native plant collections for potential future releases. In cooperation with USDA Forest Service Region 1 and 4, the PMC is evaluating collections of bluebunch wheatgrass, blue wildrye, Idaho fescue, tufted hairgrass, Sandberg bluegrass, mountain brome, slender wheatgrass and yarrow. The PMC is also evaluating collections of muttongrass, sulphurflower and parsnipflower buckwheat and basin wildrye. With luck you may be seeing new releases from these species in future years.



Call for Seed Collections or Stand | ocations



We need your help! The PMC is planning to begin initial evaluations on accessions of dusky maiden (left) and hoary aster (right) starting in the spring of 2008. We are looking for seed collections or stand location information so PMC staff can visit sites and collect seed this summer.



These are two short-lived forbs common to the Intermountain west. Both species are commonly found growing in arid sites in a wide range of soils in sagebrush habitats throughout our service area. Dusky maiden flowers in early June, and seed is ready for harvest throughout July. Hoary aster typically flowers later in the season with seed becoming ripe during August and into September. Contact Derek Tilley at the PMC or Dan Ogle at the ID state office for more information or to provide site locations.

Recent Publications and Presentations

There are several new or revised publications from the Aberdeen PMC available to download at our website. Some of these include:

- •Plant Guides for muttongrass (*Poa fendleriana*), black greasewood (*Sarcobatus vermiculatus*), parsnipflower buckwheat (*Eriogonum heracleoides*), needle and thread (*Heterostipa comata*), Thurber's needlegrass (*Achnatherum thurberianum*), prairie junegrass (*Koeleria macrantha*) and the Sandberg bluegrass complex (*Poa secunda*).
- Technical Note 15. Managing Black Greasewood Sites.
- Revised Technical Note 19. Calibrating a Seed Drill for conservation Plantings.
- •26 revised Plant Release Brochures "Plants for Solving Resource Problems."
- •2006 Annual Technical Report.
- Coming soon: Field Guide for the Identification and Use of Common Riparian Woody Plants of the Intermountain West and Pacific Northwest Regions.

The PMC staff also gave a number of presentations and tours including:

- •Weed suppression and native plant community restoration. Idaho Weed Conference. Nampa, ID.
- PMC tour for Upper Uncompangre Project Personnel. Aberdeen, ID.
- Aberdeen PMC Report of Activities 2006: Great Basin native Plant Selection and Increase Project. Society for Range Management. Reno, NV.
- PMC tour for Great Basin Community College, Agronomy and Range Science students. Aberdeen, ID